

REMARKS/ARGUMENTS

Applicants thank the Examiner for the careful consideration given the present application, and respectfully request favorable reconsideration of the application in view of the comments set forth below.

Claims 5, 10, 21 and 55-57 have been canceled without prejudice or disclaimer.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 4, 8-9, 16, 20, 24, 25, 27, 28 and 54 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,614,809 to Verma *et al.* (hereinafter “Verma”) in view of what is alleged to be well known in the networking art (hereinafter “Knowledge”). However, Applicants respectfully submit that the combination of Verma and Knowledge fails to disclose every feature of the claims.

Each of the independent claims requires a table comprising a plurality of addresses for the caller in a tunnel communication and a plurality of other addresses for a callee, separately. The address determination part selects, from among the plurality of addresses a caller address to be included in the encapsulated communication target data when the information-processing device is identified as being the source by the judgment part. Likewise, a callee address from among the plurality of addresses in the table to be included in the encapsulated communication target data when the information-processing device is identified as being the destination by the judgment part. Therefore, the information-processing device can easily select the proper IP address according to the status of the information-processing device as either the caller or callee without relying on a heuristic algorithm, and the selected addresses will not conflict. Further, the data size of the table can be smaller as the tunnel communication is realized between two devices and the table is distributed amongst each device.

Neither Verma nor Knowledge teaches or otherwise discloses an address determination part with such a table for selecting the proper address according to the status of caller or callee. In fact, the information-processing device in Verma does not include an address determination part that assigns an address based on the status of the information-processing device as a caller or

callee. By way of example, a computer terminal as the information-processing device of claim 4 includes a judgment part that is to perform a tunnel communication judges whether it is the terminal that is initiating the tunnel communication (i.e., the source) or whether the computer terminal is the destination of the tunnel communication. When the computer terminal is identified as being the source, the address determination part selects the caller address for the computer terminal. Similarly, when the computer terminal is identified as being the destination, the address determination part selects the callee address, which is different from the caller address, for the computer terminal. In both instances, the address selected for the computer terminal by the address determination part is selected based on the status of the computer for that particular tunnel communication.

Verma, in contrast, simply discloses defining an IP network address for the tunnel initiator, a tunnel identifier assigned to the tunnel connection itself, and a host name identifier or system identifier for the requested tunnel endpoint. Col. 6, lines 7-21. According to Verma, the host name and system identifier of the tunnel endpoint can be defined by a domain name system (“DNS”), a Dialup Number Information System (“DNIS”), or Automatic Number Identification (“ANI”) system. Each system selects an address based on criteria other than, and independent of, the status of the tunnel initiator as a source or destination of a tunnel communication. For instance, the DNS simply translates a uniform resource locator (“URL”) such as www.google.com into the IP address of a server hosting the Google website. The DNIS utilizes a code defined by a telephone service provider to route telephone calls to the appropriate party. The ANI system uses another code defined by a telephone service provider to bill a party for a pay for use service.

The failure of Verma to teach selecting the address of an information-processing device based on the status of such device as a source or destination of a tunnel communication as required by claim 4 is recognized in the Office action. In addressing Applicants’ arguments, it is explained that “[w]hile Verma disclosed conventional methods [of selecting addresses] the disclosure of Verma is not limited to said conventional methods.” Final Office action, pg. 5, bottom 8 lines. The logic appears to be that since Verma teaches conventional methods of selecting addresses, Verma’s scope should be expanded to teach other, non-disclosed methods as

well. Applicants respectfully submit that such logic, if upheld, would improperly expand the teachings of Verma to teach every type of address selection technique, no matter how complex and sophisticated, simply because Verma teaches a conventional technique. The prior art must provide more than just a possibility. There must be some articulated reasoning to support the conclusion of obviousness.

It is also expressly acknowledged that Verma does not explicitly disclose distinguishing between the caller or callee, but that one of ordinary skill would recognize that a remote client originating a tunnel request is a caller, and a responding entity is the callee. Office action, pg. 8, last ¶, Applicant agrees that an initiator of a tunnel communication is the caller and the recipient the callee. However, neither Verma nor one of ordinary skill would find it obvious to assign tunnel communication addresses to the parties based on their status as either a caller or callee. There would be no benefit in modifying the teachings of Verma to distinguish between the two since the IP network addresses are assigned therein by conventional methods, such as DNS for example, independent of the status of a caller or callee. Thus, making such a distinction in Verma would amount to performing an extra step for no readily-apparent benefit, which also weighs against a finding of obviousness.

Further, Applicants respectfully submit that one of ordinary skill would not find the claimed invention obvious in view of the combination of Verma and Knowledge. Verma is directed toward a network with L2TP (Layer 2 Tunneling Protocol). As shown in Fig. 1, Verma realizes tunnel communication between tunnel initiator 30 and tunnel endpoint 50. In Fig. 2, tunnel initiator 30 and tunnel endpoint 50 is linked with L2TP. To set up the tunnel communication, tunnel initiator 30 unilaterally initiates the session, requesting tunnel endpoint 50 to function as a server. As such, the tunnel endpoint 50 alone manages the address information for the tunnel communication. In contrast, according to the present invention, the two information-processing devices each have a table of addresses for establishing a tunnel communication. Each information-processing device has a judgment part and selects the address for tunnel communication according to the decision of a caller or a callee. So, in setting up the tunnel communication, the trigger can be bilateral between the information-processing devices.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 11-15, 32, 36, 37 and 55-58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Verma in view of U.S. Patent No. 7,395,354 to Keane *et al.* (hereinafter “Keane”). However, Applicants respectfully submit that the combination of Verma and Keane fails to disclose every feature of the claims.

Regarding claim 32, Applicants respectfully submit that the combination of Verma and Keane fails to teach, suggest or otherwise render predictable accessing a table provided to at least one of the information-processing devices, the table comprising a plurality of addresses from which a caller address is to be selected and assigned to a caller in each tunnel communication and a plurality of addresses from which a callee address is to be separately selected and assigned to a callee in each tunnel communication. For reasons analogous to those above for claims 4 and 20, Applicants respectfully submit that the combination of Verma and Keane fails to teach, suggest or otherwise render predictable accessing such a table provided to an information-processing device to separately retrieve a caller address for the caller in a tunnel communication and a separate address for the callee. Each address is selected from among a plurality available for the caller and caller. The information-processing device in Verma and Keane do not assign addresses based on the status of the information-processing device as a caller or callee, and do not perform any steps based on such a distinction.

Further with regard to claim 32, Applicants respectfully submit that the combination of Verma and Keane also fails to teach, suggest or otherwise render predictable that “at least one of the caller address and the callee address is to be used for different information-processing devices involved in a plurality of different tunnel communications.” As claimed, the caller address, the callee address, or both the caller and the callee addresses can be assigned to the respective caller and/or callee in two or more different tunnel communications involving different sets of information-processing devices. By way of example, the same caller address can be assigned to two different information-processing devices, each acting as the caller in two different tunnel communications. As explained in the present application, this is advantageous because it allows for an unlimited number of addresses to be assigned, unlike protocols such as

DHCP or AutoIP, or in DNS implementations such as those disclosed in Verma and Keane, for example.

The Office action explains that this limitation is interpreted simply as assigning the same address to both the caller and callee devices, which are two distinct devices. However, such an interpretation fails to observe that the same caller address, for example, is assigned to the caller in two different tunnel communications involving different sets of information-processing devices. Moreover, assigning the same address to both the caller and the callee in a tunnel communication as disclosed by Verma and Keane would result in erroneous communications between the caller and callee. Thus, assigning the same address to both the caller and callee in the prior art as proposed would render the prior art unsuitable for its intended purpose, which weighs against a finding of obviousness.

For at least the above reasons, Applicants respectfully submit that the combination of Verma and Keane fails to teach, suggest or otherwise render predictable every feature recited in claim 32 as required to maintain a rejection of that claim for purposes of 35 U.S.C. §103(a). Further, Applicants respectfully submit that one of ordinary skill would not find the absent features obvious in view of the combined teachings of Verma and Keane.

The remaining claims in the present application are allowable for the limitations therein and for the limitations of the claims from which they depend.


In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

Appl. No. 10/597,496
Amdt. Dated November 19, 2010
Reply to Office action of August 20, 2010

PATENT AF
RESPONSE UNDER 37 C.F.R. §1.116
EXPEDITED PROCEDURE
ART UNIT: 2444

If there are any fees resulting from this communication, please charge same to our
Deposit Account No. 16-0820, our Order No.: MTIS-40442.

Respectfully submitted,
PEARNE & GORDON, LLP

By: 
Donald J. Firca, Jr. – Reg. No. 48,140

1801 East 9th Street
Suite 1200
Cleveland, Ohio 44114-3108
(216) 579-1700

Date: November 19, 2010